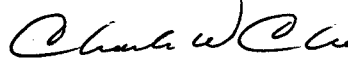




GIAC GPS Interagency Advisory Council

September 16, 1999

MEMORANDUM FOR: Dr. Neal Lane
Director, Office of Science and Technology Policy

FROM: Charles W. Challstrom 
Chair, GPS Interagency Advisory Council

SUBJECT: Accelerated GPS Modernization

During recent Civil GPS Service Interface Committee meetings held September 13-14, 1999, and the Institute of Navigation conference that followed, the GPS Interagency Advisory Council (GIAC) obtained new information on opportunities for accelerating GPS modernization. In particular, the briefings provided by Colonel James Armor, USAF, GPS Joint Program Office, indicated that an accelerated GPS modernization is possible with only moderate risk -- implementing the new civil signals on the last nine Block IIR and all Block IIF satellites. Also, the recent increase in the Mean Mission Duration (MMD) of the Block IIAs, and the expectation that the MMD of the Block IIRs will be further extended, indicates that GPS modernization will be further delayed. The economic benefits that will result from GPS modernization are well known at this point. Early implementation will assure GPS maintains its international leadership role and assist with the National Security benefits.

At the same meetings, a presentation on the planned European system, Galileo, indicated that the European Union is considering use of the L5 frequency of 1176.45 MHz and in-orbit testing by late 2003. GIAC is concerned that if the Galileo project is able to maintain this schedule, GPS will be forced to demonstrate a non-interference approach before L5 can be implemented on GPS as Galileo will be the existent system on that spectrum. This could further delay, or possibly prevent, implementation of L5.

At the Chief Executive Officer Roundtable, held at the Department of Commerce in December 1998, numerous economic benefits of GPS were described. Those participants wholeheartedly advocated early implementation of the GPS civil signals and expressed the needs for the highest possible positioning accuracy. GIAC recognizes that the greatest number of benefits described in the CEO report will be obtained through the deployment of the L5 signal, and that funds allocated to early implementation will have maximum leverage if spent on early L5 deployment.

These topics were discussed at a GIAC meeting held on September 14, 1999. By unanimous vote of all agency representatives, it was agreed that this memorandum should be prepared expressing our strong desire for an accelerated GPS modernization. The GIAC appreciates your leadership role with respect to GPS modernization, and offers any assistance your office might require.